

DRAFT

- underlining means more information needed or needs checking.

Subm B31 nr Subm 116 + 117

194

NATIONAL TRUST OF AUSTRALIA (WA)
LANDSCAPE ASSESSMENT FORM

NATURAL AND CULTURAL LANDSCAPES

1. IDENTIFICATION AND LOCATION

Current Name of Place: 'The Old Trough' and associated wetland. (Possible alternative names - The Old Watering Trough or the Old Stock Trough)

Other Names: "Barnard Springs".

Mrs Mulder phoned re: submitting this site. I told her we had accepted it.

K.M.A

Location: (road, suburb or area) Sawpit Road, Ellenbrook.

Size: est - 1.2 hectares

Local Government Authority: Shire of Swan

Map Reference SLSMS Sheet No. - Perth 1000 BG 35 40:16 (UBD Street Directory Map 151 - N13)
Latitude/Longitude: 31 46'S 116 04'E

Land Tenure:

If freehold -

current owner: Theo and Dorothy Mulder
postal address: Box 246 Bullsbrook WA 6084

Title details: Volume: 421? Folio: 122? Lot: 8247. Previously Lot 239.

If Crown Land -
vested in:

Purpose:

Current Land Use: Part of private property - owner occupied.

Landform: Yanga Complex and to west is Bassendean Complex North.

Vegetation Types: Wetland, dominated by *Eucalyptus rudis* woodland, with *Melaleuca preissiana* and *Acacia saligna* (check). Remnant vegetation on Bassendean sand, including Bracken Fern.

Special landscape features: Historic pool and jarrah watering trough, feeding into remnant wetland.

Prominent associated persons, events: Built by Barnard Drummond Clarkson, surveyor and explorer 1836-1900

Significant associated dates: Pool and Trough built in approx ? Before 1887 ^{surveyor/Explorer.} 1864.

Condition (cultural landscape condition, garden condition, vegetation condition, disturbance factors such as weeds, fire, rubbish, fragmentation by clearing, tracks, feral animals etc).

TROUGH Fiona has details. Dorothy's notes have other details.

WETLAND AND VEGETATION The condition of the wetland varies. The part nearest to the Trough's water source has remained fenced off from horses and is generally in good condition. The understory is not diverse, however covers the ground well to the exclusion of weeds in most of the area. Part of the understory is predominantly *Lepidosperma longitudinale* reeds and in good condition, whilst other areas are heavily infested with *Paspalum* sp. Other weeds include Inkweed or Red Ink Plant (*Phytolacca octandra*) and Kikuyu (*Pennisetum clandestinum*)

The area of wetland (~0.4 ha) on the eastern side of the site has been grazed irregularly by one or two cattle. Thus, it has a degraded understory. However, the presence of remnant trees, including Flooded Gums, is important. The owners have recently removed the cattle to see how well the area regenerates over the next two or so years.

Type of Assessment (*geological monument, natural landscape, cultural landscape*): Natural landscape with cultural element.

Assessment Team:

Name: Fiona Bush
Contact address: 110 Peartree Lane Parkerville WA 6081
Contact telephone: 295 4109 Fax

Name: Kirsten Tullis
Contact address: 8 Rosebery Street, Bayswater WA 6053
Contact telephone: 271 3549 (h) 328 4411 (w) Fax: 227 1031 (w)

Name: Lesley Thomas
Contact address: 77 Duke Street
Contact telephone: 339 6555 (h) 339 2300 (w) Fax: 319 1660

Name: Dorothy Mulder
Contact address: Lot 8247 Saw Pit Road, Bullsbrook WA 6084
Contact telephone: 571 1452

Date assessed: 25 March 1995

2. **STATEMENT OF SIGNIFICANCE**

Insert a statement of heritage significance based on the following values:

- | | |
|----------------------------------|-------------------------------------------------|
| 1 presence of endangered species | 8 diversity of species, communities |
| 2 scientific importance | 9 "naturalness" |
| 3 educational importance | 10 rarity |
| 4 social importance | 11 fragility |
| 5 aesthetic importance | 12 position in an ecological or geographic unit |
| 6 historic importance | |
| 7 recreational importance | |

The site offers diversity in significance. The trough and pool are historic, rare, and fragile. Both the trough and wetland proffer scientific, social and educational values and are aesthetically pleasing. The Flooded Gum woodland is significant, for such vegetation complex is poorly conserved elsewhere. The wetland is in the northernmost part of the Lexia wetlands, and now in a fragile position given the enormous urban development underway in the region which may presumably have both direct and indirect effects on the hydrology. The groundwater which supplies the spring may be affected by drainage for the Ellenbrook area.

3. **CONSERVATION RECOMMENDATIONS**

List conservation recommendations to protect and manage the area for its heritage values.

It is recommended the trough and other associated historic remains be examined by a qualified conservator (WA Museum - Fremantle Maritime Museum) for guidelines on its secure management.

An appropriate management plan be drawn up for the wetland and adjacent area. The Water Authority of WA and the Department of Environmental Protection should be immediately notified if the heritage values of the historic site and wetland are in danger of degradation due to changes in the water regime (ie falling groundwater levels). It should be noted that there is now a turf farm close by, and therefore potential for changes in water regime and nutrient impact should be investigated and monitored.

4. **HISTORY**

Insert any background history or previously collected information including references or useful sources of relevant material.

Fiona has the history details. From Dorothy's notes: Hand carved comprising two 20 foot lengths of Jarrah. Sheep trough. Spring water runs from a timbered dam through a 13.5 foot carved Jarrah pipe into the Trough. Prior to the building of the Trough the stock men used to put a hollow log into the spring so that water could run out. The

remains of a fence can be seen nearby, presumably to keep the stock away from the spring. Clarkson owned other properties and used to move the sheep between them. Some were moved, via the Trough, inland from the coast at Wanneroo to Toodyay to rebuild the condition of animals due to a deficiency of Selenium which caused them to go 'coasty' (notes on Mindarie). A similar trough was built by Clarkson at his Toodyay property called 'Foggerthorpe'. This was destroyed during earthworks on the Goomalling/Toodyay Road. The ten acre lot (then Lot 239) was purchased by Clarkson in ? and surveyed in 1896.

↳ Mulder's property

More recent history led to the rediscovery of the trough after the owners previous to the Mulders set fire to the wetland in 1970.

5. DESCRIPTION

Describe the landscape in general terms and give detail of areas of heritage interest including landform, flora, fauna, modifications of cultural interest, cultural activities of significance.

TROUGH The pool from which the trough drains is roughly circular and approximately 4m in diameter, and deep. The trough - had a wooden top. Remains of old fence posts are adjacent to the trough.

HYDROLOGY, WETLAND AND VEGETATION The water is fed by a groundwater spring from the Gnangara groundwater mound, and after passing through the property eventually drains into Sawpit Gully and Ellen Brook. According to the owners during their 14 years here, there has always been a good flow in the stream - they have measured ~~between 1250 and~~ 1500 gallons (convert to litres) per hour permanently in summer and winter. However, in the summer of 94/95 there was a dramatic reduction in the water flowing into the pool and trough. There are several possible contributing factors: the upgradient urban developments and corresponding de-watering process; the previous dry months; and the immediate and delayed effect of the regional drought (low rainfall over several years) with associated increased drawing from the regional groundwater table by the WAWA, especially following the summer of 1991/92 which was characterised by two exceptionally ~~hot~~ ^{DRY YEARS} days. It is not known what impact, if any, the nearby turf farm may have.

The wetland boundaries have been chosen according to best condition and the presence of remnant *Eucalyptus rudis* (Flooded Gum) woodland. Such woodland is also found within the Ellenbrook Nature Reserve. According to Gibson and Keighery (1992) *Eucalyptus rudis* woodland has a very poor conservation status and typically is restricted to rivers and creeks. This is due to their natural rarity and to land clearing. Other predominant trees at the Site are *Eucalyptus calophylla* (Marri) and *Melaleuca preissiana*, there are also a few *Acacia saligna*. Overall the wetland is visually pleasing. Some of the *Melaleuca preissiana* are magnificent and the tree ferns add an interesting element. The history of the ferns (*Sphaeropteris cooperi*) is not known, presumably they were planted decades ago. Lesley said something about the history of these ferns being in a reference somewhere. Originally the wetland was more extensive, and was part of the Lexia Wetland suite of Ellenbrook. The property between Ellenbrook and the site have been cleared of all but a few trees. *RUDIS EUCALYPTUS (V. LARGE)*
MELALEUCA PREISSIANA.

The ridge above the spring is the Bassendean Sand soil type and its vegetation is mostly degraded. The owners report a loss of quite a few species of wildflowers, probably due in part to grazing by kangaroos rehabilitated by the owners. Another other possible reason for the low number of species is the dominance of bracken fern (*Pteridium esculentum*), which extends up the ridge from the wetland. Old fallen and dead Banksia and Nuytsia trees are apparent. The least degraded area has been included in the assessment, starting from where a dense stand of *Xanthorrhoea preissii* occur on the southern boundary.

In recent years a Barking Owl (*Ninox connivens*) was seen once on the property. In the immediate vicinity the owners report Brush Wallabies (*Macropus irma*), Western Grey Kangaroos (*Macropus fuliginosus*), Southern Brown Bandicoots (*Isodon obesulus*), Echidnas (*Tachyglossus aculeatus*) and Honey possums (*Tarsipes rostratus*). The Southern Brown Bandicoot is listed on Schedule A of the Wildlife Conservation Act of 1970.

6. REFERENCES

List references used to complete the assessment.

Gibson N. and Keighery B. 1992 *Plant Communities of the Northern Swan Coastal Plain - with special reference to uncommon and potentially rare plant communities*. In *Bushland in Our Backyard*. Wildflower Society of W.A.

Hedde, Lonegeran and Havel (1978) Darling System, Vegetation Complexes, Perth Sheet Vegetation, 1:250,000.

Notes on Mindarie - PR 7020

7. PHOTOGRAPHS

Provide slide photographs showing the landscape setting and habitats, flora and fauna, or cultural elements of specific interest. If possible use Ektachrome EC 135 35mm slide film ISO 100/21. Make sure all slides are clearly labelled and provide a list here with matching numbers.

SLIDES:

Attachments

8. SPECIES LISTS (optional but desirable)

Attach lists of flora and fauna if available, indicating dates of surveys, field workers, and persons responsible for verifying identifications.

Crustacea - gilgies. Leslie to ID. Little black fish

pygmy perch.

Flora - wetland

Birds - include a Barking owl seen

9. LOCATION MAP

Attach a location map from a street directory or council map, or if not available, a sketch with notes indicating:-

a) how to find the site

b) the direction of north

c) a scale or distance between two points on the map

d) public accessibility to site including contact person or telephone numbers as well as any restrictions.

—————NNational

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L&C Committee Recommendation Date:

Council Recommendation Date:

Owner advised: Date:

Local Authority advised: Date:

Nominated to Australian Heritage Commission: Date:

Interim listing on RNE: Date:

Accepted on Register of National Estate: Date:

Record of Telephone Call

| | | |
|-----------------------------------------|-----------------------------|-----------|
| Call from Mr Mulder 9571 1329 | Call to Natalie Thorning | Folio No. |
| Dept owner Lot 6247 Sawpit Rd | Dept | File No. |
| Subject Bullsbrook - Barnard Springs | Date 11 / 1 / 99 | Time |

Details

ring having received a letter from us notifying those people that made submissions to the system to update program of the release of Perth's Bushplan. Had ring system hotline number and been told their land was not in Bushplan and was ringing us to find out why it would like it protected. Explained that Bushplan had named a representative cons. system + that the reason was likely to be because similar bushland was recognised elsewhere in larger size + better condition, or was already protected in some way. Explained the National Trust caretaking programme that they may wish to do that (+ ring Bridget to let her know). Said I would have a close look + ring back.

Spoke to Bronwen who suggested we go look at it but is a modified landscape + does not have outstanding flora or fauna values that we are aware of. BK will talk to Brenton Kraft.

Action taken/Recommendation(s) (where applicable)

re Shephard possibility of. Could put on Heritage register for protection purposes.

Approval (if required)



Department of Environmental Protection

Westralia Square, 8th Floor, 141 St Georges Terrace, Perth WA 6000

15-1-99

Spoke to Mrs Moulder + said reasons for not including were likely to be because of larger area already protected (Ellenbrook Cons. Area) + were trying to avoid private lands if possible as usually means problems. Said we would try and visit, probably with Bridget, as that was why we had public comment period.

Was very concerned of rezoning + development in the area that they may not be able to continue enjoying their lifestyle - bushland, horses, rehab children, rehab native animals etc.

I reassured that she would still be able to most likely ways around it (but not quite sure what she was referring to).

was very friendly + obviously v. worried.

Fissecha
(Vissar) Gabromeseal

rang Shire of Swan
15-1-99

-should be ringing back (planning officer)

